

In the Claims

Please amend the claims to read as follows:

1. (Currently Amended) A method for powering an implanted medical device by generating electrical energy from a subject's body, comprising:

physically contacting an external surface of a part of the subject's cardiovascular system with a pulsation transducer to sense pulsations therein and to convert said pulsations into electrical energy;

and utilizing said electrical energy to power said implanted device;

said pulsations of the part of the subject's cardiovascular system being converted into electrical energy by utilizing said pulsations to pump a liquid with respect to an electrical coil to generate an electrical voltage in said coil;

said liquid being pumped in one direction through a closed-loop path enclosed by said electrical coil;

said closed-loop path being at least partly defined by a displaceable member mechanically coupled to said pulsation transducer physically contacting said external surface of the part of the subject's cardiovascular system so as to be cyclically displaced by said pulsations of said part of the subject's cardiovascular system.

2. Cancelled.

3. (Currently Amended) The method according to Claim 21, wherein said liquid is a magnetic liquid.

4. Cancelled.

5. Cancelled.

6. (Currently Amended) The method according to Claim-51, wherein said closed loop path is an annular chamber defined by an outer, circular, stiff wall, and an inner, circular, flexible wall, constituting said displaceable member and mechanically coupled to said part of the subject's cardiovascular system by one or more loops encircling both said part of the subject's cardiovascular system and said inner, circular, flexible wall.

7. (Previously Presented) The method according to Claim 6, wherein said annular chamber includes one or more one-way valves which permit liquid flow only in one direction around said annular chamber.

8. (Previously Presented) The method according to Claim 1, wherein said part of the subject's cardiovascular system is an artery of the subject.

9. (Previously Presented) The method according to Claim 1, wherein said part of the subject's cardiovascular system is the heart of the subject.

10. (Previously Presented) The method according to Claim 1, wherein said pulsations of a part of the subject's cardiovascular system are converted into electrical energy by utilizing said pulsations to drive a piezoelectric device to generate an electrical voltage.

11. (Currently Amended) Apparatus for powering an implanted medical device by generating electrical energy from a subject's body, comprising: a transducer constructed so as to be mountable in contact with an external surface of a part of the subject's cardiovascular system for sensing pulsations in said part of the subject's cardiovascular system and for converting said pulsations into electrical energy; and output leads for connecting the output of said transducer to said implanted device.;

said transducer including a liquid chamber, an electrical coil electromagnetically linked to the liquid in said chamber, and a pumping element mechanically coupled to said part of the subject's cardiovascular system so as to be driven by said pulsations thereof to pump said liquid through said chamber and to generate thereby an electrical voltage in said electrical coil;

said liquid chamber being of a closed-loop configuration and enclosed by said electrical coil; said annular liquid chamber is defined by an outer, circular, stiff wall, and an inner, circular, flexible wall, mechanically coupled to said part of the subject's cardiovascular system by one or more loops encircling both said part of the subject's cardiovascular system and said inner, circular, flexible wall.

12. Cancelled.

13. (Currently Amended) The apparatus according to Claim-1211, wherein said liquid is a magnetic liquid.

14. Cancelled.

15. Cancelled.

16. Cancelled.

17. (Currently Amended) The apparatus according to Claim-1611, wherein said annular chamber includes one or more one-way valves which permit liquid flow only in one direction around said annular chamber.

18. (Previously Presented) The apparatus according to Claim 11, wherein said transducer is constructed and dimensioned to sense pulsations of an artery of the subject, and to convert such pulsations into electrical energy.

19. (Previously Presented) The apparatus according to Claim 11, wherein said transducer is constructed and dimensioned to sense pulsations of the subject's heart and to convert such pulsations into electrical energy.

20. (Previously Presented) The apparatus according to Claim 11, wherein said transducer is a piezoelectric device.